of the Arizona Highway System

Levels of Developmen

Level of Development

Central to the ADOT assessment of State Highway System needs is the notion of Level Of Development (LOD), a planning tool introduced as an integrative concept in the State Highway System Plan. LOD provides a hierarchical ordering of System routes into five categories in terms of the relative importance of routes to the System as a whole. The assignment to a LOD category takes into account the route's functional classification, level of significance, current and future daily traffic, current and future truck traffic, and other unique route characteristics (e.g., recreational use). The LODs are described briefly below, followed by a description of the role that the LOD concept plays in the assessment of System needs.

Level of Development 1: Interstate and urban controlled access facilities form the backbone of the system. Among many functions served, LOD 1 routes provide the principal means of interstate travel, serve the greatest volume of traffic, link the state's metropolitan areas, and provide the major truck routes. These routes are built and maintained to the highest standards.

Level of Development 2: In terms of both use and function, LOD 2 routes are the most important non-controlled access routes statewide. For the most part, these routes were constructed as two lane rural highways designed to accommodate relatively low traffic volumes. With continuing growth, new demands are being placed on these highways to accommodate increased automobile and truck traffic. Hence, these routes are prime candidates for major reconstruction projects to provide the additional capacity to maintain both highway safety and performance.

Level of Development 3: Routes without unique travel or service characteristics comprise the LOD 3 category. These are mainly two lane rural routes, which may be expanded to four lanes in urban areas. Most of the routes on the System are in this category.

<u>Level of Development 4</u>: Highways bearing low traffic volumes and serving primarily as feeder routes with local significance compose the LOD 4 category.

<u>Level of Development 5</u>: The last category in the hierarchy is comprised of routes which no longer serve a state level service role, together with routes that have never been built. Thus, LOD 5 routes are prime candidates to transfer from the state system.

The following maps depict all state highways and the LOD to which they have been assigned. Note that over 90% of the total mileage is in rural areas, and that the LOD 2 network is much smaller than either the LOD 1 or 3 systems. It is apparent that LOD 3 routes comprise by far the largest category, especially on the rural system.

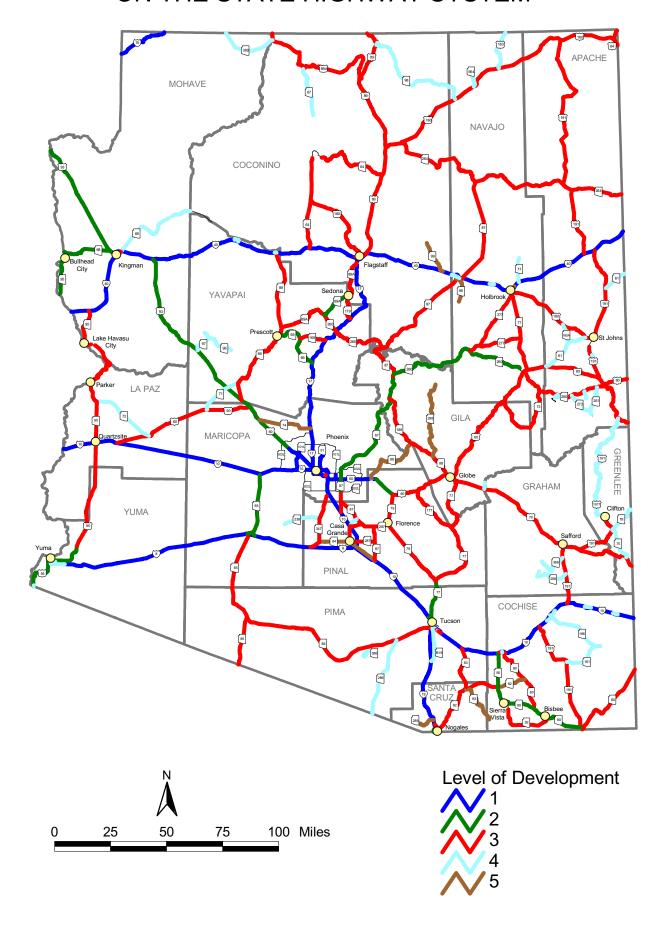
Stability of Route Assignments to Levels of Development

Because the assignment of a highway to a particular LOD is based on a set of standards, a highway may be reassigned to another LOD when the function or use of that highway changes. However, given the nature of the standards and current projections of population growth and travel in Arizona, such changes are likely to occur infrequently. It was assumed that the functions served by individual routes would not change sufficiently in the coming decade to warrant reassignment to another LOD.

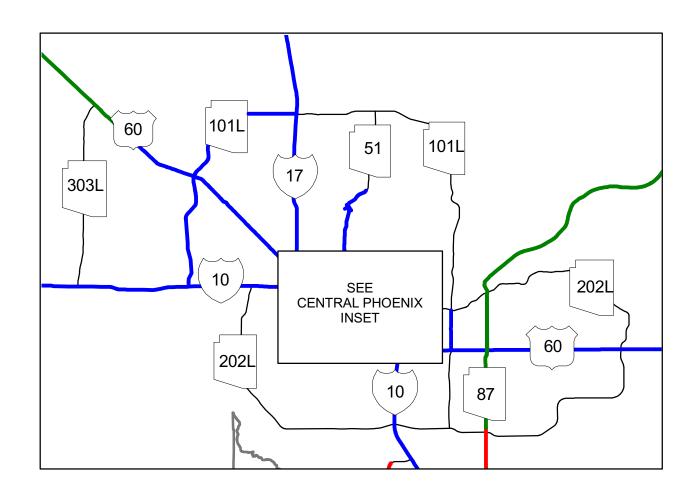
Value of the Level of Development Concept

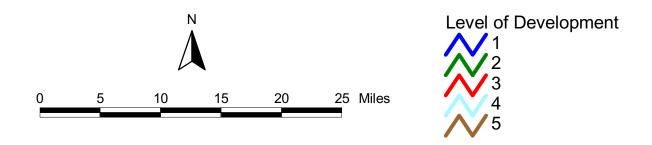
Much of the utility of the LOD concept lies in making explicit important differences among system components. The hierarchy of routes points out the fact the System is not homogeneous; rather it is comprised of interrelated parts which vary considerably in terms of functions served. LOD, then, may be viewed as a categorical system, which summarizes certain critical differences among routes. Differences which have implications for a variety of administrative, operational, and investment decisions. For example, recognition of such differences is important in defining appropriate construction or reconstruction projects. It is important in establishing priorities among routes competing for limited funds.

THE LEVEL OF DEVELOPMENT ON THE STATE HIGHWAY SYSTEM

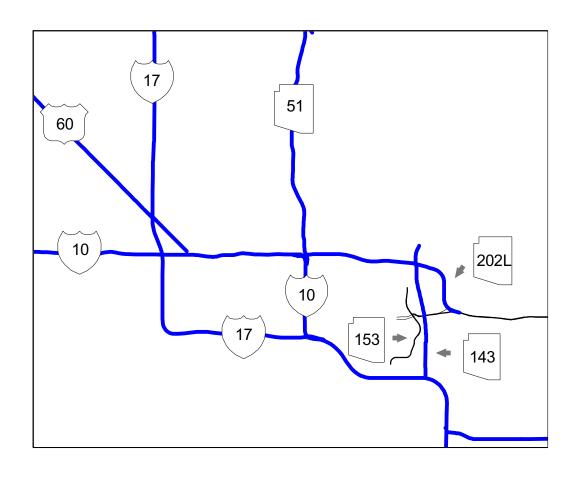


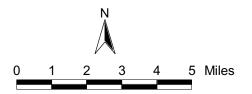
INSET LEVEL OF DEVELOPMENT IN THE PHOENIX METROPOLITAN AREA





INSET LEVEL OF DEVELOPMENT IN CENTRAL PHOENIX







INSET LEVEL OF DEVELOPMENT IN THE TUCSON METROPOLITAN AREA

